

**ABSTRACT**

A dual-rail static logic gate with a self cut-off mechanism is disclosed. In an embodiment, the output of the first rail is coupled to the input of the pull-up device of the second rail and vice versa. The cross-coupling allows the self cut-off mechanism of the static gate to function properly and provides for components which have lower capacitance than conventional static gates. The lower capacitance results in a faster static gate.